Defence Innovation Cluster:

'Defence Sourcing Portal – Lets get you on it and started'

23rd October 2024

Innovation Through Collaboration

Update...

1/ Follow on

- Stratorise – MOD project
- Authentica Industrial Platforms

2/ Overview example

- Mini – Sub

3/ Space Command

- Opportunity to contribute to White Paper

4/ 3 Main routes to funding

5/ Workshop activity

![Team Defence Information logo — www.teamdefence.info]

Trade Bodies – Space Command White Paper

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- ADS
- techUK
- Team Defence Information

Team Defence Information (TDI)

- Team Defence is a not-for-profit membership organisation funded by industry that harnesses and co-ordinates volunteer contributions from its 167 members and the MOD
- A collaborative association that informs Defence policy and pilots new ways of working to transform the Defence ecosystem with a MOD 3 Star Governance Structure
- Team Defence is exceptional in the way it pursues obtaining a wider understanding for Defence
- Provides coherence, common solutions and corporate memory

MOD and Industry Lead:

1. DMSO/DSEP (Defence Synthetic Environment Programme) – Workshop and White Paper
2. Digital Twins - Three White Papers, capability development)
3. Hydrogen – Conference, Workshop and White Paper
4. Space Command (Vanguard) – White Paper
5. Test & Evaluation (Plus COP)
6. Futures Lab (Remote Autonomous Systems)
7. FCI (Future Capability Innovation)
8. Kindred (Hirst)
9. DASA - DTEP (Defence Technology Exploitation Programme)

Support

- Natural Resources & Infrastructure
- Trading Forum
- DCPP (Defence Protection Partnership) External Comms Working Group
- DAIC (Defence AI Centre)
- Dstl (Search Light)
- Dstl - Metis

Other

- DASA - DTEP (Defence Technology Exploitation Programme) - Panel
- Industry Nominations for CDLS Commendations 2024 - Panel
- Harnessing AI
- Babcock Postgraduates (Behaviours)

Outside but connected

- FSB (Federation of Small Businesses, 200,000 members) – National Enterprise and Innovation Committee
- Innovate UK Business Connect (Innovate UK KTN) – Vice Chairman Defence and Security Advisory Board

As a member

![Award Winner badge — TEAM DEFENCE INFORMATION, DIGITAL TWIN]
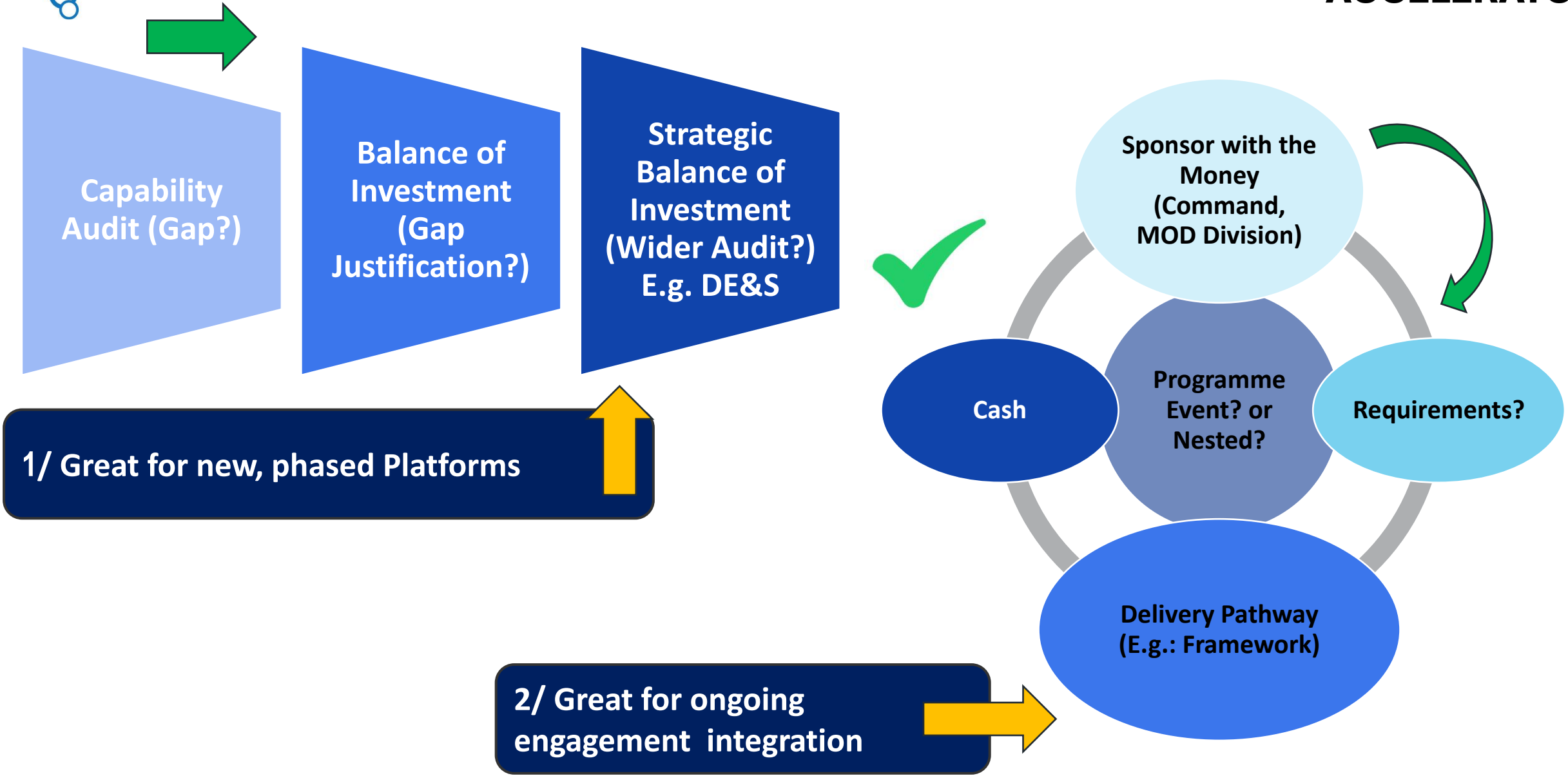
Space Command – White Paper

Space Command

- Mandate approved by Space Command
- Vanguard Space Team now writing a White Paper – **Space Command Vanguard Paper 'What should be UK Defence's approach to commercial space integration?'**
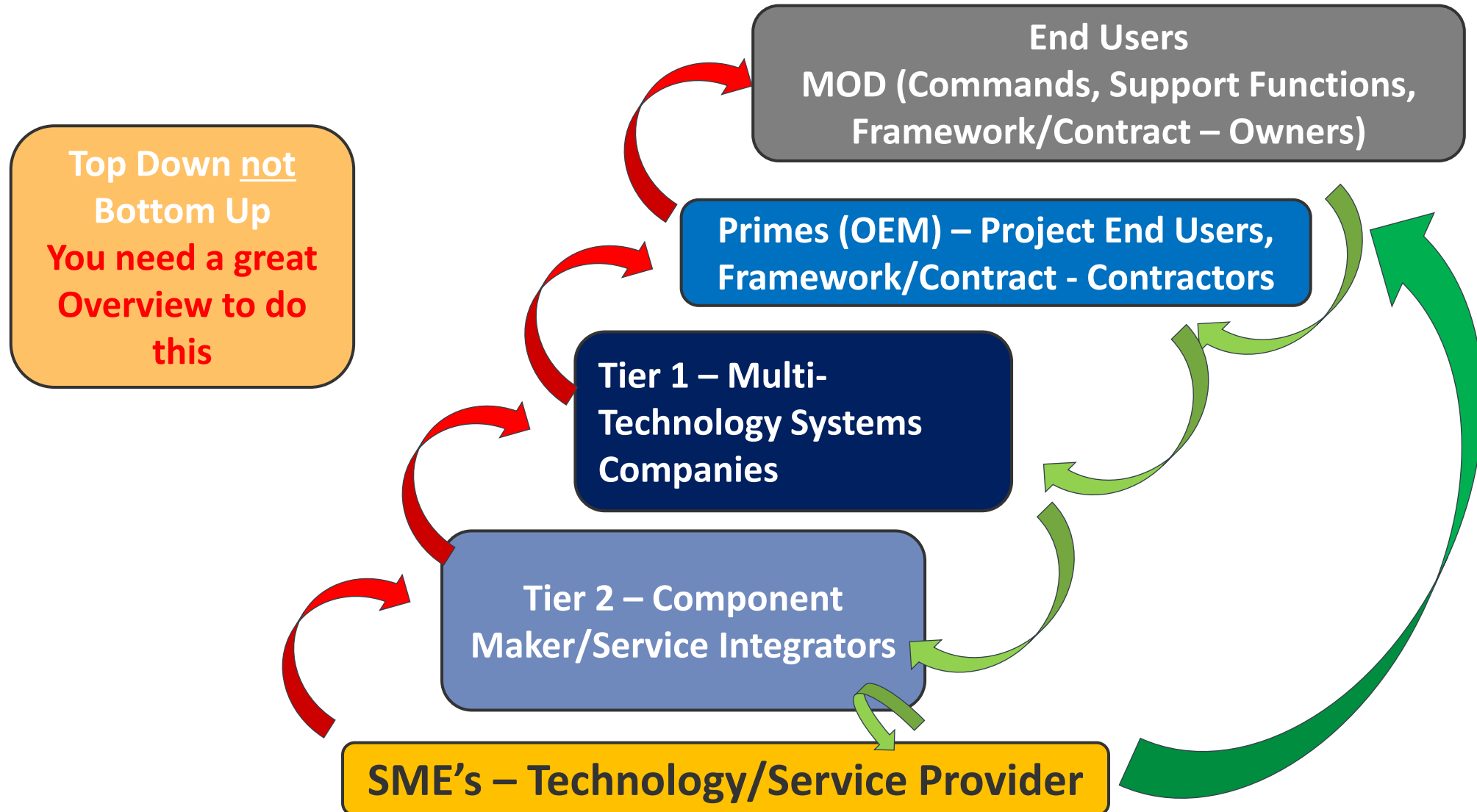
Requirements

6. To draw on external thinking to help develop Space Command.

7. The ethics work Vanguard have done is a good example of this, which appears to lead to a bounded output, Space Command conducted 'brainstorming' as a team to try and think what a similar pressing question for them might look like.

8. The US DoD has also recently published a commercial space integration plan which, rather than seeing commercial suppliers as bolt on, starts to embed them as Defence capabilities.

9. This begs the question what UK Defence's approach should be to commercial space integration should be. A paper that looks to answer this would helpfully inform Space Command's developing approach.

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Contract Pathway

Capability Audit (Gap?)

Balance of Investment (Gap Justification?)

Strategic Balance of Investment (Wider Audit?) E.g. DE&S

1/ Great for new, phased Platforms

2/ Great for ongoing engagement integration

Sponsor with the Money (Command, MOD Division)

Cash

Programme Event? or Nested?

Requirements?

Delivery Pathway (E.g.: Framework)

'Normal' Tier Progression

End Users
MOD (Commands, Support Functions, Framework/Contract – Owners)

Top Down not Bottom Up
You need a great Overview to do this

Primes (OEM) – Project End Users, Framework/Contract - Contractors

Tier 1 – Multi-Technology Systems Companies

Tier 2 – Component Maker/Service Integrators

SME's – Technology/Service Provider

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Funding Routes - MOD Anticipated Budget: £190 B over next 10 years

DASA
- **Open Calls**
- **Focus Areas**
- **DTEP** (Defence Technology Exploitation Programme)
- **Ideas Market Place**
- **Defence Innovation Loan**
- **DIANA** (NATO Version)

Dstl
- **R-Cloud** (Will remain till 2028 till Category Groupings contracts are established – See Metis)
- **Frameworks** (14 off i.e. Serapis) Mandated to stop money 'leakage' via direct contractor engagement
- **Tasking from Commands** - Was a 100% funded on demand operation now must share government cuts so will prioritize tasks (1 in 1 out recruitment)
- **Search Light**
- **Missile Defence – Storm**
- **Science & Tech Futures**
- **Weapons Systems - Thunderbolt**
- **Metis** (Starts process to replace frameworks: R-Cloud Version 5 (V. 4 current) - Centres of excellence

DE&S
- **Portal** - New industry Gateway – (Direct front door) - removal of stove pipes, FCI Heavily Involved
- **FCI** (Futures Lab)
- **EDP** (Engineering Delivery Partner) **Aurora**
- **PDP** (Project Delivery Partner)
- **LTPA (T3E)** - TEST PT

Front Line Commands
(Innovation Units)
- **RAF - RCO**
- **StratCom – JHub**
- **Army – Aerial**
- **Navy – OCTO**
- **Space**

MOD Central
- **Defence Sourcing Portal** (Committee)
- **Other Frameworks**
- **Other Functions – DIO** (Defence Infrastructure Organisation), **SDA** (Submarine Delivery Agency), **DD** (Defence Digital – SPACE – Higher TRL), **Team Leidos** (Logistics supply)
- **Commercial 'X'**
- **Acquisition Pipeline – General and DIO** (Update with forecasts)
- **DGP** (Defence Growth Partnership)
- **UKDSC** (UK Defence Solutions Centre)

Contractual Factors:
- **Social Value** (10%)
- **JOSCAR** (Hellios)
- **Cyber Essentials and CE Plus**
- **SME Target = 25%**
- **Facility Security Clearance** (Was List X)
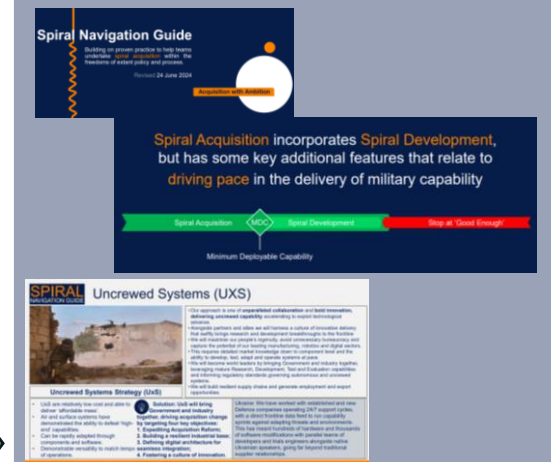- **Government Procurement Reform Act** (Single source, more flexibility)

MOD Key Accounts (18 off)
- Airbus
- Babcock
- BAE Systems
- Boeing
- Capita
- DXC
- General Dynamics
- KBR
- Leidos
- Leonardo
- Lockeed Martin
- MBDA
- QinetiQ
- Raytheon
- Rolls-Royce
- Serco
- Thales
- Ultra

What does this mean?
- SME engagement will be more direct and with new emphasis, importance and focus
- MOD will have to own more risk (ways to mitigate)
- Even more reduced MOD available to 'users' bandwidth and SQEP
- Cannot fall back on frameworks to deliver work
- Dstl will 'reject' more work requests (commercial to take over)
- Less points/ways of entry directly to MOD
- Spiral approach – How, when and why help needed

Spiral Development:

Spiral Navigation Guide

Spiral Acquisition incorporates Spiral Development, but has some key additional features that relate to driving pace in the delivery of military capability

Spiral Acquisition ◇ MDC ◇ Spiral Development — Stop at 'Good Enough'

Minimum Deployable Capability

SPIRAL Uncrewed Systems (UXS)

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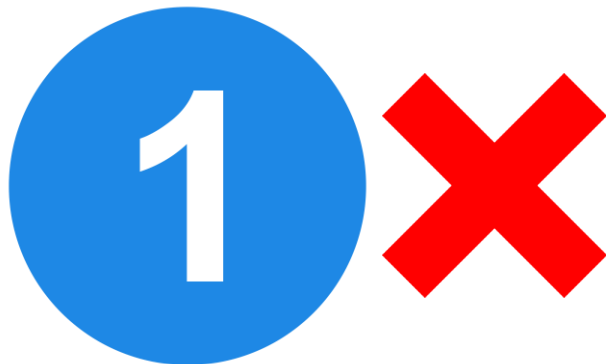
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DASA

DASA Overview
(Defence and Security Accelerator)

DASA is part of the Ministry of Defence (MOD), but also has links to the Home Office. It is populated primarily by staff from Dstl Defence, Science and Technology Laboratories (Dstl) **DASA** register/apply via https://www.gov.uk/government/organisations/defence-and-security-accelerator

What does DASA do? DASA finds and funds exploitable innovation to support UK defence and security quickly and effectively, and support UK prosperity. It does this through calls for proposals for potential innovative solutions, either

1. **Open calls** - for innovation of any type, or
2. **Focus areas** - such as (as of 22/10/24):
• IFA042 - Unlocking the true potential of Test & Evaluation for Defence
• IFA035 – Making Science Fiction a Reality: Future Directed Energy Weapons
Line-of-Sights have included
• IFA025 - Reducing Reliance on Global Navigation Satellite Systems Quantum Augmented Position, Navigation and Timing Sensing Capability
• IFA032- Double Act: National Security Technologies
• IFA036 - Beyond Line-of-Sight Communications
• IFA038 - Advanced Materials for Defence
Spinoff technologies from other markets and domains are very attractive, as a substantial proportion of confidence in the technology has already been proved, albeit in a different application and/or domain.

Technology maturity and bidding
Projects are normally classified by the research state at the start and end of a project, defined as TRL (**T**echnology **R**eadiness **L**evels which range from "initial idea" at TRL 1 right through to "available for market" at TRL 9) levels.

Currently DASA is primarily looking for "Rapid Impact" proposals for projects that will be from TRL 4 to TRL 6 or 7, normally for 6-12 months duration, but in one recent case for 3 months duration. It does at times look for earlier R&D innovations from TRL 2 to TRL4 – normally 3-6 months duration. Funding is a grant for full 100% of predicted costs, making DASA projects an attractive proposition.

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DASA

DASA Overview
(Defence and Security Accelerator)

Bid process

The bid process is relatively light-weight. The bids invariably consist of the following sections:
• Summary
• Desirability – What will the innovation do for defence and who might use it?
• Feasibility – How will the innovation work technically
• Viability – How will the project be conducted, who will be involved and what will be needed – and why?
• Finance – Price breakdown – Labour, subcontract, capital equipment, materials, consumables, travel & subsistence, overheads.
Understanding DASA's relationships and dynamics with other government departments, their methods and areas of interest is vital to winning bids.

Funding levels

Contract awards values range from £50K to £500K, with the majority in the £150K-250K range. DASA budget varies per year, and per Call for Proposals, and may be boosted for specific calls and urgencies (COVID and some Ukraine requirements being good examples) DASA is often funded by other parts of MOD to run competitions and manage the resultant projects.

When successful

Contracts are relatively simple, with minimal liabilities, enabling prime contractors to create back-to-back contracts quite easily. There is minimal company scrutiny, and companies from the EU can be involved. However, be aware that this can create security issues. All personnel involved will need to provide personal information for security checks – these are not the standard UK Security Clearances (SC), but more lightweight. IPR is to DEFCON 705, meaning that all background IPR remains with the supplier, but that any foreground IPR delivered can theoretically be used by the MOD. We have never known of a situation when MOD has used the foreground IPR.

1

DASA

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DASA Overview
(**D**efence **a**nd **S**ecurity **A**ccelerator)

What happens after a DASA Project?

When the DASA funding in a project has finished, there are routes to further funding through Strategic Command and the end-user forces, but also through the Defence Technology Exploitation Programme (DTEP), and/or mentoring to gain investment.

Either way, you need to find the route to wider exploitation

Our experience with DASA

They are good when you have won funding (quite flexible) what they don't do well is when the funding project has finished in providing the route to wider exploitation (A MOD user to develop it further) part of the problem of managing this situation is in handling the civil servants and service personnel involved, from DASA, Dstl, and MOD end-users

Mark Swabey, MD of Risk Reasoning mark.swabey@riskreasoning.co.uk is adept at all aspects of DASA interface, success rates vary but statistics tend to be around 8% for first time bidders, he has a track record of winning 50% and then he goes on to managing them successfully and can be used as a bid writer and manager (subject to your own private commercial arrangement), please mention my name.

8% VS 50%

2 R- Cloud

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What is it?
R-Cloud is **the Defence Science and Technology Laboratory's (Dstl)** marketplace for science and technology (S&T) research, providing ready access to the latest research opportunities

How it works
R-Cloud is different from traditional procurement frameworks, enabling suppliers to:
• Apply quickly and easily using the online application process
• Join at any time during the R-Cloud term, because it's a dynamic agreement
• Receive targeted invitations to bid for opportunities tailored to your key capabilities and skills
• Access opportunities to contract directly with MOD
• Retain intellectual property rights
• Efficiently take up opportunities using R-Cloud's smooth online tasking process that includes standardised terms and conditions and tasking forms
• Everything is managed using the online R-Cloud service from applying to join, to responding to relevant opportunities.

Joining R-Cloud
To join R-Cloud you'll need to:
• Create an account at https://rcloud.dstl.gov.uk/
• Choose the research areas relevant to your capabilities and skills
• Complete the main application including company details
• Provide a technical narrative (statement) to explain your organisation's experience and capabilities
• Submit the completed application
They will then assess your application and you'll be notified of the outcome through the online service.

Cyber Essentials certification is a minimum requirement for contracts where MOD identifiable information is transferred, stored or accessed electronically

Cyber Accreditations

Key concerns for SME's:

1. **Complexity of the Assessment Process:** Many SMEs can find the Cyber Essentials assessment complex and potentially overwhelming, which can be a significant barrier
2. **Lack of IT Support:** Without dedicated IT personnel or external support, SMEs often struggle to understand and implement the necessary cyber security measures
3. **Absence of Cyber Security Policies:** Many SMEs do not have established cyber security policies, which are critical for the assessment, and this creates additional hurdles
4. **Changing Standards:** SMEs often face difficulties keeping up with evolving requirements from year to year, due to the fast-changing nature of cyber security threats
5. **Avoiding a Box-Ticking Mentality:** Some SMEs are concerned that without proper guidance, their certification can feel like a box-ticking exercise rather than fostering genuine improvements in security

We use Cyber Trust for Cyber Accreditation:

Cyber Trust, take you through the process very well, they fully back IASME's Cyber Essentials certification and believe it is an essential tool for demonstrating a strong level of cyber security to clients, government bodies, and other stakeholders who demand high standards. Their goal is not to criticise the certification itself but to help bridge the gap for those who may find the process challenging.

Contact
W: https://cyber-trust.co.uk
T: 01702 749651

DSP (Defence Sourcing Portal) – Space examples

3

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1/ £22M MOD **'MINERVA'** contract First £22 million MINERVA satellite supports 100 UK jobs - GOV.UK (www.gov.uk) Surrey Satellite Technology   Home | Small Satellite supplier | Surrey Satellite Technology Ltd | SSTL

2/ **EU Expression of interest** (see link) Open call: Does your organisation work in the space industry? Do you want to fly your experiment to space? The European Commission is looking for innovative IOD/IOV experiments! | EIC Community (eismea.eu)

3/ Open Opportunity. **SKYNET Enduring Capability** Narrowband Satellite System Pre-Qualification Questionnaire is now live on the Defence Sourcing Portal. Closing 20 September 2022 For more guidance, you can also visit: SKYNET Enduring Capability (SKEC) programme - GOV.UK (www.gov.uk)

4/ **Satellite Applications Catapult and the UK Defence Solutions Centre**, on behalf of MOD MOD Combined Action: Focus Areas (wufoo.com) of note below;

- The Ministry of Defence recently published its Defence Space Strategy (DSS), focused on its responsibility to 'Protect and Defend' within the broader context of the National Space Strategy (NSS) – with goal one of the NSS being to grow and level up our space economy.
  The Defence and Security Industrial Strategy (DSIS) also outlined plans to drive innovation and accelerate the development of next-generation technologies; ensuring the UK expands its competitive, pioneering and world-class defence and security industries.
  MOD is now conducting work to implement the combined ambition of the DSS, NSS and the DSIS – and to do this needs a better understanding of the sector.
  To support this, the Satellite Applications Catapult and the UK Defence Solutions Centre, on behalf of MOD, is seeking your input on the capacity of companies with a UK base to deliver against a sample of different technologies.
  If your company is involved in the development, manufacture, or sustainment of any of the following
- Phased Array Antennas
- Intersatellite Links
- Tracking Telemetry & Control Systems
- Space based Platform Resilience
- Assembly, Test and Integration
- Data Processing
- Ground Based Space Sensors